## REMARKS

Claims 3, 4, 6, 9, 10, 12, 22, and 23 are presently active.

In the Office Action dated 10 June 2003 ("Office Action"), claims 22 and 23 were objected to; claims 3, 4, 9, 10, 22, and 23 were rejected under 35 U.S.C. §102(b) as being anticipated by Kogan, US patent 5,321,656 ("Kogan"); and claims 6 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over the admitted prior art (Figs. 1-4) in the present application, in view of Kogan.

Claims 22 and 23 are amended as suggested in the Office Action.

Applicant believes that the cited references in the Office Action neither anticipate the presently active claims nor render them obvious over the admitted prior art. All presently active claims include the claim limitations of either an output voltage that is indicative of a local time-average maximum of the input signal voltage, or a local time-average minimum of the input signal voltage. These claim limitations are neither taught nor suggested by the cited references.

Specifically, Fig. 8C of Kogan was cited in the Office Action. The operation of Fig. 8C was not explicitly described in Kogan, but starting in column 6, line 51 of Kogan, it was taught that "Figs. 8A through 8D show circuits for determining signal maximums that are analogous to the corresponding minimum finding circuits shown in Figs. 1A through 1D."

Upon reading the specification describing Figs. 1A through 1D, it is to be understood that in Fig. 8C, nodes a and b are discharged to ground during a "pre-charge" interval by turning ON transistors Q2 and Q3. During an acquisition interval, nodes a and b are isolated from ground by turning OFF transistors Q2 and Q3, and node a is coupled to SIGNAL line by turning ON transistor Q1. The voltage at node b follows upward the voltage at node a, minus the threshold voltage value of transistor Q4. The voltage at node b will eventually provide the maximum of the voltage at node a (minus the threshold voltage value). However, the voltage at node b <u>will not follow downward</u> the voltage of node a if the voltage at node a were to decrease during the acquisition interval. This is so, because it is taught in Kogan, column 4, beginning at line 15, in regard to Figs. 1A and 2, that "when the SIGNAL and node a start to increase in voltage, node b cannot follow, but

rather retains the lowest voltage that it was discharged to as it followed node a down." In understanding Fig. 8C from Fig. 1A, in the preceding quote from Kogan, "decrease" is to be substituted for "increase", "highest" for "lowest", "charged" for "discharged", and "up" for "down".

Therefore, as taught in Fig. 8C of Kogan, the voltage at node b cannot be the local time-average maximum of the input signal voltage. There is no time averaging involved. The circuit Fig. 8C of Kogan is a peak detector. Similarly, Kogan does not teach a voltage that provides the time-average minimum of the input signal voltage.

Furthermore, all of the presently active claims include the claim limitation that the leakage current is in excess of 1 micro ampere per micron of device width. Dai, et al., US patent 6,339,347 ("Dai"), was cited in the Office Action for teaching this claim limitation. However, Applicant respectfully disagrees with this assertion. In column 4, line 37, Dai teaches leakage current in the range of 0.1 micro amperes per micron of device width. This is off by a factor of ten from what is recited in the presently active claims.

For the above reasons, Applicant believes that Kogan does not teach the presently active claims, and furthermore, Kogan, the admitted prior art, and Dai do not suggest or teach, whether taken separately or in combination with each other, the presently active claims.

If any additional charges are due, please charge our Deposit Account No. 02-2666.

Respectfully submitted,

Dated: November 10, 2003

John Ward, Reg No. 40,216
for Seth Z. Kalson, Reg. No. 40,670, Attorney for Intel Corporation (Assignee)

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025-1030
(408) 720-8300